Attorney Docket No.: A6425/T45100
TTC No.: 016301-045100US

SECURE END-TO-END COMMUNICATION OVER A PUBLIC NETWORK FROM A COMPUTER INSIDE A FIRST PRIVATE NETWORK TO A SERVER AT A SECOND PRIVATE NETWORK

ABSTRACT OF THE DISCLOSURE

In a semiconductor fabrication facility in which a plurality of fab-owned and operated client systems located within the facility are connected to a fab-owned Intranet using a first physical connection type, a method of allowing an employee associated with a supplier enterprise to access a supplier-owned Intranet owned by the supplier enterprise from a supplier-controlled computing device located within the fabrication facility, a method for allowing secure end-to-end communication between the supplier-controlled computing device and the supplier-owned Intranet. In one embodiment the method includes connecting the computing device to the fab-owned Intranet through a node using a second physical connection type that is different from the first physical connection type; establishing an isolation pipe through the fab-owned Intranet between the node and a hub/firewall using virtual private network technology; generating a request to logon to the supplier-owned Intranet from the computing device; formatting the request in a secure Internet protocol such that the request is broken up into multiple packets, with each packet including at least a header portion and an encrypted data portion; and transmitting the formatted request through the isolation pipe over the fab-owned Intranet to the hub/firewall and then over the public Internet to the supplier-owned Intranet with end-to-end encryption.